

REMARKS

In response to the Office Action mailed November 18, 2003, Applicants respectfully request reconsideration. To further the prosecution of this application, each of the rejections set forth in the Office Action has been considered and is addressed below. The claims as presented are believed to be in allowable condition.

Claims 1-22 were previously pending in this application. No claims have been amended, added or canceled. As a result, claims 1-22 remain pending, with claims 1, 8 and 15 being independent.

Extensive prosecution has taken place in this application, including responses to four Office Actions and two telephone interviews. Applicants continue to believe that none of the prior art of record is close to the claimed subject matter. Applicants wish to draw prosecution on this application to a close. To that end, Applicants respectfully request that if this response does not place the claims in allowable condition, the Examiner telephone the undersigned at the number below to discuss whether a stalemate has been reached, so that Applicants can consider an appeal.

Claim Objections

Applicants note with appreciation the indication that claims 3, 10 and 17 would be allowable if rewritten in independent form. However, because Applicants believe that the asserted references do not render obvious the base claims upon which claims 3, 10 and 17 depend, Applicants have not rewritten these claims in independent form.

Rejections Under 35 U.S.C. §103(a)

Claims 1, 2, 6-9, 13-16, and 20-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,487,177 to Weston-Dawkes ("Weston-Dawkes") in view of U.S. Patent No. 6,363,051 to Eslambolchi et al. ("Eslambolchi") and U.S. Patent No. 6,081,848 to Grun et al. ("Grun"). Applicants respectfully traverse this rejection, as the Office Action fails to set forth a prima facie case of obviousness, and the claims patentably distinguish over the asserted combination.

I. The Office Action Fails to Set Forth A Prima Facie Case of Obviousness

The rejection of Claims 1, 2, 6-9, 13-16 and 20-22 under 35 U.S.C. §103(a) is improper because the Office Action fails to establish a prima facie case of obviousness.

A. No Explanation Is Provided of The System That One Skilled In The Art Would Have Purportedly Been Led To Based Upon The Teachings of the Prior Art

To establish a prima facie case of obviousness, the Office Action must explain what type of modified system one of skill in the art would have been led to based on the combined teachings of the cited references. MPEP §2142. That is, the Examiner must explain "the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter." MPEP 706.02(j). Hindsight knowledge of the Applicant's disclosure may not be employed to simply pick and choose various features from different references. MPEP §2142. Applicants respectfully assert that the Office Action does not meet this initial burden, as various features of the prior art are referenced using the claims as a template, but no explanation is provided of the nature of the system the Examiner believes would have resulted from following the combined teachings of Weston-Dawkes, Eslambolchi and Grun.

Moreover, Applicants are unclear as to exactly what system *could have* resulted from following the combined teachings. Eslambolchi discloses a method for recovering from failure of a switch on a frame relay network (Abstract), while Weston-Dawkes discloses a system that does not even employ a switch. The Office Action does not explain the system that purportedly would result from following the combined teachings of these references, and fails to explain which features from the combined system are relied upon by the Examiner to meet the claim limitations. This is a failure to explain the rejection in the manner required by MPEP §706.02(j).

B. No Motivation To Combine the Asserted References

In addition, a prima facie case of obviousness is not set forth because no properly supported motivation is established for combining the references.

First, the Office Action makes inconsistent assertions with respect to the references. For example, in ¶5 the Office Action concedes that Weston-Dawkes does not disclose out of band commands, but in ¶4 the Office Action states that Weston-Dawkes discloses an out of band command which identifies a target address in a device. This cannot be so.

Second, the alleged motivation for the combination is unsupported by the references. Specifically, the Office Action concedes that Weston-Dawkes does not teach out of band commands, but alleges that Eslambolchi does, and asserts that one skilled in the art "would have set up an Eslambolchi network in Weston-Dawkes in order to set up dedicated lines for certain features." This assertion is entirely unsupported in the prior art of record. In the passage cited by the Office Action, Eslambolchi discloses a method for restoring switches in a frame relay network following an outage, wherein a controller polls the switches using a path which is out of band from the frame relay network. Eslambolchi makes no disclosure, in the cited passage or elsewhere, which would have motivated one of skill in the art to modify the system of Weston-Dawkes.

In fact, as discussed above, Eslambolchi is entirely directed to restoring switches, and Weston-Dawkes does not employ switches. Thus, one skilled in the art would not have been motivated by Eslambolchi to do anything at all with the system disclosed by Weston-Dawkes, and certainly would not have been motivated to modify it in the manner alleged.

For each of the reasons discussed above, the Office Action fails to set forth a prima facie case of obviousness. Accordingly, Applicants respectfully assert that the rejection of claims 1, 2, 6-9, 13-16, and 20-22 under 35 U.S.C. §103(a) should be withdrawn.

II. The Claims Patentably Distinguish Over The Asserted Combination

A. Claims 1-7

Claim 1 recites a method of processing an out of band control command executed by a host computer and a multi-path system including the host computer, a device and multiple physical paths, coupling the host computer to the device, the out of band control command identifying a target address in the device and bypassing at least one layer in a normal read/write path in the system, the out of band control command further identifying, from among the multiple physical paths, a target physical path for transmission of the out of band control command between the host computer and the device. The method comprises steps of: (A) selecting a selected physical path for transmitting the out of band control command between the host computer and the device, the selected physical path being selected from among the multiple physical paths based upon a selection criteria that enables the selected physical path to be other

than the target physical path identified by the out of band control command; and (B) transmitting the out of band control command between the host computer and the device over the selected physical path.

As discussed above, the Office Action is unclear on exactly which features of each asserted reference are relied upon, and what system it is believed would have resulted from the asserted combination. For example, the Office Action is inconsistent in both conceding that Weston-Dawkes does not disclose out of band commands, and also asserting that Weston-Dawkes meets some limitations associated with an out of band control command (e.g., in ¶4, wherein the Office Action asserts that Weston-Dawkes discloses an out of band control command identifying a target address in a device).

Despite the inconsistencies in the Office Action, Applicants below assume that Eslambolchi is relied upon to teach an out of band command, as the Office Action is explicit in this respect. However, the “out of band” commands disclosed by Eslambolchi fail to meet a number of limitations recited in claim 1. For example, Eslambolchi does not disclose an out of band command which identifies a target address in a device. Eslambolchi discloses a method for communicating configuration data and recovery information to frame relay switches via an “out of band” channel (i.e., one which is separate and distinct from normal control channels)(col. 2, lines 50-54). Eslambolchi makes no disclosure or suggestion of an out of band command that identifies a target address in a device.

Eslambolchi also does not teach an out of band command which bypasses at least one layer in a normal read/write path in the system, as recited in claim 1. Eslambolchi teaches a method whereby an alternative channel is selected for transmitting data to a frame relay switch when the usual channel is indisposed (col. 2, lines 36-54). The fact that it is purposefully directed to a separate channel is what makes the command “out of band.” Thus, Eslambolchi does not teach an out of band command which bypasses a layer in a normal read/write path.

Further, Eslambolchi does not teach an out of band command which identifies, from among multiple physical paths, a target physical path for transmission. Again, the out of band command of Eslambolchi is intentionally directed to a separate channel. Eslambolchi does not teach or suggest a command which identifies a channel over which it is to be transmitted.

Further, the asserted combination fails to teach or suggest processing an out of band command such that a physical path is selected for transmitting the command which is different from the target physical path specified by the command. The Office Action cites a passage within Weston-Dawkes which purportedly discloses selecting a physical path different from the target physical path specified by a command. Applicants respectfully disagree. The cited portion (col. 11, lines 35-45) merely describes a solution to a problem described in the passage immediately above it, whereby a large number of active "taps" might hinder communications performance within a subnetwork. The passage states that one or more taps may be deactivated, and that "subnetwork access interfaces" may be employed to map communications to active taps within the subnetwork.

Weston-Dawkes simply does not disclose selecting a different physical path for transmitting any command other than the physical path which is specified by the command. In fact, Weston-Dawkes does not even disclose, in the cited passage or elsewhere, a communication which specifies a physical path. In addition, because Weston-Dawkes does not teach out of band commands, it can not possibly teach processing an out of band command by transmitting it over a different physical path than the one specified. As discussed above, Eslambolchi also does not disclose an out of band command which specifies a target physical path. Thus, the asserted references fail to meet this limitation, either individually or in combination.

In summary, the asserted combination fails to disclose or suggest: (1) an out of band command which identifies a target address in a device, (2) an out of band command which bypasses at least one layer in a normal read/write path in the system, (3) an out of band command which identifies, from among multiple physical paths, a target physical path for transmission, and (4) processing an out of band command such that a physical path is selected for transmitting the command based upon a selection criteria that enables the selected path to be other than the target physical path specified by the command. Thus, the asserted combination fails to meet the limitations of claim 1, and the rejection of claim 1 under 35 U.S.C. §103(a) should be withdrawn for this additional reason.

Claims 2-7 depend from claim 1 and are patentable for at least the same reasons.

2. Claims 8-14

Claim 8 recites a computer readable medium encoded with a program which, when executed, performs the method of claim 1. Thus, for the reasons discussed above with reference to claim 1, the asserted combination fails to meet the limitations of claim 8. Accordingly, the Applicants respectfully request that the rejection of claim 8 under 35 U.S.C. §103(a) be withdrawn.

Claims 9-14 depend from claim 8 and are patentable for at least the same reasons.

3. Claims 15-22

Claim 15 recites a host computer for use in a multi-path system including the host computer, a device, and multiple physical paths coupling the host computer to the device. The host computer comprises at least one processor to execute an out of band control command identifying a target address in the device and bypassing at least one layer in a normal read/write path in the host computer, the out of band control command further identifying, from among the multiple physical paths, a target physical path for transmission of the out of band control command between the host computer and the device; and at least one controller that selects a selected physical path for transmitting the out of band control command between the host computer and the device, the selected physical path being selected from among the multiple physical paths based upon a selection criteria that enables the selected physical path to be other than the target physical path identified by the out of band control command; and transmits the out of band control command between the host computer and the device over the selected physical path.

As discussed above with reference to claim 1, the asserted combination fails to disclose or suggest (1) an out of band command which identifies a target address in a device, (2) an out of band command which bypasses at least one layer in a normal read/write path in the system, (3) an out of band command which identifies, from among multiple physical paths, a target physical path for transmission, and (4) processing an out of band command such that a physical path is selected for transmitting the command based upon a selection criteria that enables the selected path to be other than the target physical path specified by the command. Thus, the asserted combination fails to meet the limitations of claim 15. Accordingly, Applicants request that the rejection of claim 15 under 35 U.S.C. §103(a) be withdrawn.

Serial No.: 09/474,607
Conf. No.: 2467

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Art Unit: 2142

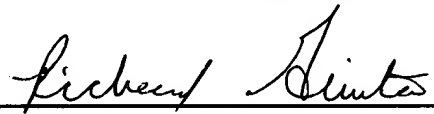
Claims 16-22 depend from claim 15 and are patentable for at least the same reasons.

CONCLUSION

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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Docket No. E0295.70136US00
Date: February 19, 2004
x3/18/04